

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte
VOLKER DANNERT
and JOACHIM BANCK

Appeal No. 2002-0707
Application No. 09/093,574

ON BRIEF

Before KIMLIN, OWENS and LIEBERMAN , Administrative Patent Judges.

LIEBERMAN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the decision of the examiner refusing to allow claims 1 and 3 through 13 which are all the claims pending in this application.

THE INVENTION

The invention is directed to a storage container assembly. Enclosed therein is a plurality of spent fuel rods. Spaces are present between the fuel rods. The spaces are filled with a bulk fill which may be zeolite or activated charcoal. Additional limitations are described in the following illustrative claims.

THE CLAIM

Claims 1 and 13 are illustrative of appellants' invention and are reproduced below.

1. An ultimate storage container assembly, comprising a gas-tight container, an arrangement of a plurality of spent fuel rods and spaces between said fuel rods, said arrangement being gas-tightly enclosed in said container, and a bulk fill selected from the group consisting of zeolite and activated charcoal embedding said spent fuel rods in said container, said bulk fill penetrating said spaces.

13. An ultimate storage container assembly, comprising a gas-tight container, an arrangement of a plurality of spent fuel rods and spaces therebetween, said arrangement being gas-tightly enclosed in said container, and a bulk fill selected from the group consistent of zeolite and activated charcoal embedding said spend fuel rods in said container and penetrating said spaces, said container being formed with steel walls and steel plates welded in gas-tight fashion to said steel walls.

THE REFERENCES OF RECORD

As evidence of obviousness, the examiner relies upon the following references:

Saha et al.	4,778,628	Oct. 18, 1988
Gaffney	4,891,164	Jan. 2, 1990
Markowitz	4,950,426	Aug. 21, 1990

Stucky et al.

5,169,566

Dec. 08, 1992

THE REJECTIONS

Claims 1, 3, 4 and 7 through 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Stucky.

Claim 5 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Stucky in view of Markowitz.

Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Stucky in view of Saha.

Claim 13 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Stucky in view of Saha and Gaffney.

OPINION

We have carefully considered all of the arguments advanced by the appellants and the examiner and agree with the appellants that the rejection of the claims under §103(a) is not well founded. Accordingly, we reverse each of these rejections for the reasons discussed herein.

The Rejection under § 103(a) over Stucky

It is the examiner's position that,

Stucky does not specifically describe his container as containing spent fuel rod. Instead he describes his invention as applying to toxic and radioactive materials. Stucky, column 1, lines 24-29. Spent fuel rods are **radioactive**. Spent fuel rods are **waste**. (That is what is implied by the term "spent"). Spent fuel rods are **materials**. They can therefore be classified as radioactive waste materials.

See Answer, page 4. We disagree with the examiner's analysis.

Stucky is directed to engineered cementitious barriers for isolating radioactive waste materials. See column 4, lines 19-29. Getters are utilized in the barriers and include materials that, "adsorb, absorb, chemically react, ionically bond, trap, attract, or otherwise bind to selected liquids, gases or ions." See column 4, lines 39-43. These materials function by containing radioactive waste materials. See column 4, lines 33-38, 44-48 and column 3, lines 5-24. The getters include zeolites as required by the claimed subject matter. See column 4, lines 42-43. We find that Stucky is directed to the design of contaminant barriers to prevent specific waste constituents escaping from the environment by trapping ions. See column 27, line 61 to column 8, line 16. It is evident that the entire thrust of Stucky is directed to low level radioactive waste.

In contrast to the radioactive waste contained in the invention, Stucky, in discussing the Field of the Invention states that, "[u]nlike spent fuel rods which decay by emitting high level gamma radiation, the plutonium waste from weapons plants decays by emitting alpha particles. Alpha particles do not even penetrate paper." See column 2, lines 3-6.

On the record before us however, there is no evidence that teaches or suggests that zeolite, activated carbon or indeed any of the “getters” would also act as a barrier for the high level gamma radiation emitted by spent fuel rods, as compared to the low level radiation disclosed by Stucky. Indeed, it is well known that spent fuel rods contain the highest concentration of radioactivity known. These rods are usually shielded with water and thick lead walls and are stored on site at nuclear plants.

Accordingly, the basic assumption of the examiner that spent fuel rods are merely another form of radioactive waste material which necessarily can be treated in the same manner as the balance of the radioactive waste of Stucky fails.

The above analysis likewise applies to claim 13 which contains each of the limitations of claim 1 and additionally requires a container formed with steel walls and welded steel plates.

The references to Markowitz, Saha and Gaffney fail to overcome the deficiency of Stucky.

DECISION

The rejection of claims 1, 3, 4 and 7 through 12 under 35 U.S.C. §103(a) as being unpatentable over Stucky is reversed.

The rejection of claim 5 under 35 U.S.C. §103(a) as being unpatentable over Stucky in view of Markowitz is reversed.

The rejection of claim 6 under 35 U.S.C. §103(a) as being unpatentable over

Stucky in view of Saha is reversed.

The rejection of claim 13 under 35 U.S.C. §103(a) as being unpatentable over
Stucky in view of Saha and Gaffney is reversed.

The decision of the examiner is reversed.

REVERSED

EDWARD C. KIMLIN
Administrative Patent Judge

TERRY J. OWENS
Administrative Patent Judge

PAUL LIEBERMAN
Administrative Patent Judge

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